



City of Akron Snow and Ice Control

Frequently Asked Questions

1) How does Akron perform snow and ice control?

The City of Akron's roadway network consists of over 829 centerline miles of roadway with over 1,919 lane miles (about the same distance as driving from Akron to Phoenix) covering almost 122 million square feet (about 2,118 football fields) not including the expressways (State Routes 8, 59 and 224). The snow and ice control operations consists of two primary activities: placing de-icing and/or abrasive materials on the roadways or plowing and removing snow and ice from the roadway. These operations are based on existing pavement and subsurface temperatures, previous weather conditions, current event forecasts, timing and duration of the event and the upcoming forecasts for days after the event. Every single winter event is different based on the many factors that influence snow and ice control operations.

Placing materials on the roadways is a majority of the snow and ice control operations, based on historical snowfall data and decades of experience (a majority of our snowfall events are 3 inches or less). The material spreaders on our trucks are capable of placing materials on 2-3 lanes at a time; however the trucks can only carry so much material at a time before they have to return to one of our four material storage locations once depleted. Our snow and ice control routes are designed with this in mind, since this covers a majority of our winter storm events.

Plowing snow occurs in the larger snowfall events and most likely will take place along with the placing of materials. During extremely heavy snowfall events with high rates of snowfall accumulation the operation may be a plowing only event during the storm as trucks will not leave the routes to get additional materials. Generally, the plow width varies from 8-1/2 feet wide to 10 feet wide on most of our trucks. With typical lane widths of 13 feet or greater, it takes multiple passes to clear the roadway. Plowing also occurs at a much slower speed than placing materials.

2) How does Akron break up all of the streets and roadways into zones and routes?

With the overall goal of getting as many vehicles moving as safely and quickly as possible, Akron has divided all of the streets and roadways into three priority groups: first priority, second priority and third priority. These groups are further broken down into 51 zones with each zone having a 1st priority route map, a 2nd priority route map and a 3rd priority route map. The total route miles actually exceed total centerline miles due to the fact that routes may include only the north/south or east/west direction of travel in one route while the opposite direction is in a different route in order to maximize effectiveness and efficiencies of operations.

The first priority group streets are the most heavily traveled roadways covering approximately 900 route miles and includes: expressways, arterial classified streets (AMATS classifications), heavily traveled collector classified streets (AMATS), METRO bus routes, hospitals, schools and severe hills.

The second priority group streets are less traveled than the first priority streets covering approximately 200 route miles and include: collector streets not in the first priority group (AMATS), heavily traveled local roads, roads serving a large development with only one way in and out, dead end streets with a grade sloping toward the dead end and roads surrounding schools that are not in the first priority group.

The third priority group streets are all of the remaining City of Akron streets and roadways covering approximately 300 route miles. These local streets are generally less traveled and hilly than the 1st and 2nd priority streets.

Akron also has grouping of streets for both the main arterial streets and for bridges. These groups are more often utilized during minor events or if there may be a chance that precipitation may freeze overnight or frost may form especially on the exposed bridge surfaces (they do not have the warm ground under them to help keep them from freezing).

3) How does Akron respond to snow and ice events?

As conditions and forecasts vary with every storm event (no two storms are alike), Akron has established four levels of response to cover all events. These levels of response are based on existing roadway conditions (surface conditions, pavement surface and subsurface temperatures, previous snow accumulations, residual de-icing materials, etc.), storm event forecasts (precipitation, temperatures, wind, sun, etc.) and forecasts following the event (precipitation, temperatures, wind, sun, etc.). Pre-treating the roadways in advance of the storm event frequently occurs and depends on the existing conditions and storm event forecasts.

The highest planned level of response, LEVEL 4, includes 51 trucks covering the 51 first priority routes, followed by the second priority routes and then the third priority routes. This is the level of response for larger snow events and ice events. Depending on the storm event and following weather conditions, the third priority routes will either be serviced in their entirety; by servicing hills, intersections and hot spots; or by requests for service to the 311 – Mayor's Action Center. Roughly, it takes about 1 to 2 hours to make one pass through the routes when applying materials only. When more materials are required due to very low temperatures or with higher snowfall amounts, the time to make a pass through the route also increases. When plowing is required on these routes it requires multiple passes to service the entire roadway width, especially on the multilane main roads. This will significantly increase the time to complete the routes compared with placing materials.

The next highest planned level of response, LEVEL 3, includes 28 trucks covering the 51 routes, with a majority of the trucks covering two routes each. This is the level of response for smaller or minor snow events. The most critical routes are singled up to ensure coverage of these routes. Roughly it takes about 2-1/2 to 5 hours to make one pass through the routes that are doubled up when placing materials. As this level of response is for the smaller snow events and/or for pre-treating the roadways, plowing is not usually performed at this response level. If plowing is necessary for the event, we would move up to a level 4 response.

A LEVEL 2 response includes 21 trucks covering 51 routes with all trucks covering two routes and most covering three routes. This is the level of response for very minor snow events. The most critical routes would have a truck covering two routes with the remainder covering three routes. Roughly it would take about 3 – 7 hours to make one pass through the 2-3 routes applying materials to pre-treat the roadways. As this level of response is for the very small snow events, plowing is not usually performed at this response level. If plowing is necessary for the event, we would move up to a level 4 response.

A LEVEL 1 response includes 8 trucks covering either the 8 main routes (arterial streets – AMATS) or the 8 bridge routes. This is the level of response for minor frost/freeze events that may cause icing on bridges or typically for pre-treatment of the main routes in advance of a minor event as forecast.

4) Why doesn't my street get serviced when others around me have?

Akron has divided all of the streets and roadways into three classifications: first priority, second priority and third priority. In order to get as much traffic moving as soon as possible, the most heavily traveled streets are serviced first and then on down to the streets that are less traveled. Generally, it is a short distance of travel from a third priority street to a first or second priority street. Anyone may enter a request to have their street

serviced at any time by entering a Service Request with the 311 – Mayor’s Action Center either online at www.AkronOhio.gov/311, by calling 330-375-2311 or calling 311 by cell in most areas of Akron.

5) How do I report issues and concerns such as ice buildups, large snow piles blocking visibility at intersections and driveways or damages from the snow and ice control operations?

Issues and concerns may be entered 24/7 at the 311 – Mayor’s Action Center online at www.AkronOhio.gov/311, by calling 330-375-2311 or 311 by cell in most areas of Akron. Crews will be dispatched as soon as they are available depending on the severity of the issues.

6) How much snow does Akron get each year?

The average (mean) snowfall totals in inches (1948-present) for each winter month and the winter season are listed below (weather.gov)

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	TOTAL
Average snowfall total/Month	Average 0.3 inches	Average 4.3 inches	Average 10.1 inches	Average 12.4 inches	Average 11.1 inches	Average 8.5 inches	Average 2 inches	Average 0.1 inches	Total 48.8 inches
Monthly Temperature Average	Average 52.5 degrees	Average 41.4 degrees	Average 30.9 degrees	Average 26.0 degrees	Average 28.5 degrees	Average 37.3 degrees	Average 49.1 degrees	Average 59.5 degrees	Average 40.7 degrees

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	TOTAL
# Days with at least 1 inch snowfall	Average 0.1 Days	Average 1.17 Days	Average 3.77 Days	Average 4.47 Days	Average 3.37 Days	Average 2.77 Days	Average 0.7 Days	-	Total 16 (77.7%) Days
# Days with at least 3 inches snowfall	Average 0.17 Days	Average 0.17 Days	Average 0.67 Days	Average 0.87 Days	Average 0.97 Days	Average 0.87 Days	Average 0.17 Days	-	Total 3.4 (16.5%) Days
# Days with at least 5 inches snowfall	-	-	Average 0.27 Days	Average 0.37 Days	Average 0.37 Days	Average 0.37 Days	-	-	Total 1.2 (5.8%) Days
# Days with at least 10 inches snowfall	-	-	-	-	-	-	-	-	-

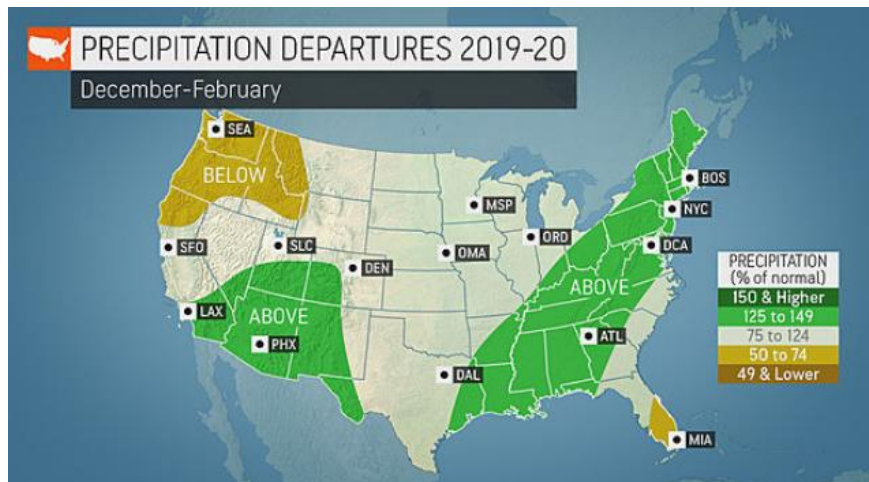
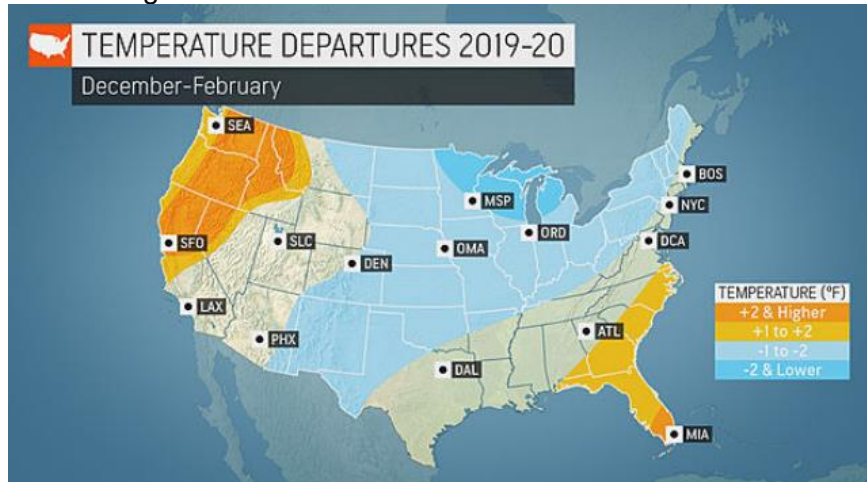
Past winter season historical data of total snowfall amounts per month in inches:

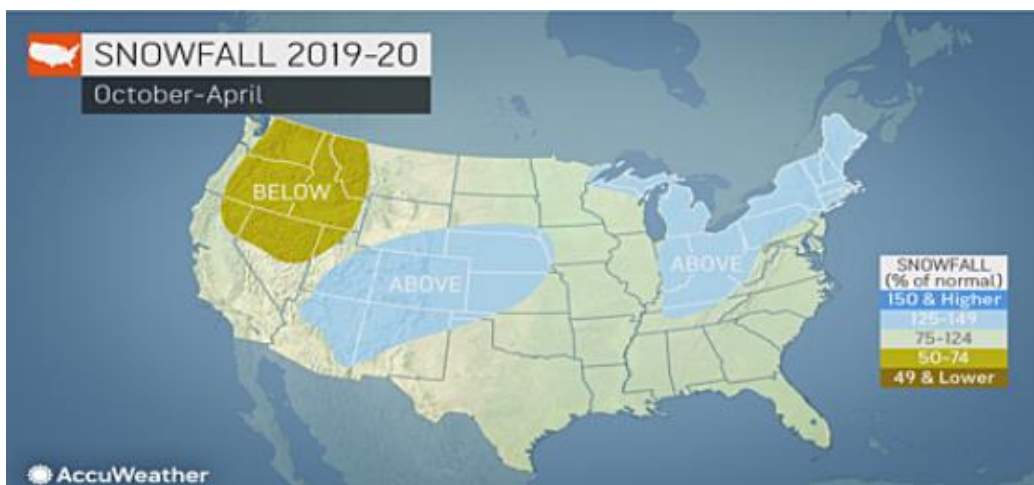
Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Season
2013-2014	T	10.7	12.5	19.1	17	9.7	0.9	T	69.9
2014-2015	0	8	0.5	21.3	23.1	6.9	T	0	59.8
2015-2016	0	T	0.2	6.1	16.4	2.4	5.1	T	30.2
2016-2017	0	2.1	7.5	7.4	4.2	13.5	2.5	0	37.2
2017-2018	0	0.1	14	12.2	11.9	8.9	6.2	0	53.3
2018-2019	0	5.7	2.3	19.7	9.4	4.7	T	0	41.8
Mean	T	4.4	6.2	14.3	13.7	7.7	2.5	T	48.7

Max. Total Year	T 2013	10.7 2013	14 2017	21.3 2015	23.1 2015	13.5 2017	6.2 2018	T 2016	69.9 2014
Min. Total Year	0 2018	T 2015	0.2 2015	6.1 2016	4.2 2017	2.4 2016	T 2019	0 2019	30.2 2016

7) What's the Akron forecast for this winter?

According to AccuWeather, the temperatures between December and February will average 1-2 degrees colder than normal (last year was 3.2 degrees above normal). Precipitation is also expected to be slightly above normal. The total accumulation for the entire winter season is expected to be in the 58-62 inch range, which is above the normal average of 49 inches.





NOAA is also forecasting above average temperatures and normal precipitation for the first part of winter followed by above average temperatures and above average precipitation during the middle of winter with above average temperatures and normal precipitation to close out the winter months. Their long range forecasts can be found here:

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

8) How does this year's forecast compare to last year's forecast?

According to NOAA, last year the early season forecasts called for above average temperatures and about average precipitation for the first half of winter and above average temperatures and below average precipitation for the second half of winter.

Last winter was dominated by the highly unusual storm occurring on Saturday January 19 and Sunday January 20, 2019. This major event dumped over a foot of snow in a 24 hour period and was followed by extremely cold temperatures for most of the week. Another unusual aspect of this storm was the relatively narrow band of heavy snowfall and accumulation across Northeast Ohio. Akron received over 12 inches of snow while most of our neighboring communities received much less. A storm summary can be found on the National Weather Service page: https://www.weather.gov/cle/event_20190119-20_WinterStorm.

9) How can I be best prepared for winter travels?

AAA provides a winter car care checklist along with a winter emergency road kit to help folks be prepared for winter travels. With the low temperatures and wind chills of winter, what would normally be a minor inconvenience could quickly become a serious safety issue.

The winter car care checklist includes:

Battery and charging system – batteries lose about 35% of their strength at 32°F and 60% at 0°F. Battery cables and terminals should be free of corrosion and tight.

Tires and tire pressure – replace any tire with less than 3/32-inches of tread (quick check by placing a penny head first into the treads – if you can see all of Lincoln's head, it is time to replace the tires). Snow tires work best in areas of heavy snow while all-season tires work in light to moderate snow conditions. Check the tire pressure frequently in fall and winter months. As temperatures drop, so does tire pressure – about 1 psi for every 10° of temperature drop.

Wiper blades and washer fluid – the blades should completely clear the glass in one swipe. Replace any blades that leave streaks or miss spots. Fill the washer fluid reservoir with a winter cleaning solution that works in freezing temperatures.

Emergency road kit – bag of abrasive materials (sand, salt, cat litter) or traction mats, snow shovel, ice scraper with brush, windshield washer solution, flashlight and extra batteries, jumper cables, extra warm clothing (hats, gloves, scarves), first aid kit, blankets, cloth or paper towels, warning devices (flares or

triangles), drinking water, non-perishable snacks, basic toolkit (adjustable wrench, pliers, screwdrivers), mobile phone chargers.

More information and recommendations are available at:

<https://newsroom.aaa.com/2010/09/2010-winter-driving/>

10) Why do I see trucks parked on the side of the road when nothing is happening?

Prior to events, trucks may stage near their response zones in order to be there when the event starts. During most storm events, the event will start at different times in different areas of Akron and different areas may actually receive more or less snow. This is especially true with lake effect snow events.

11) Why do I see trucks driving with plows up and/or salt spreaders off?

Akron currently has four storage locations of salt and de-icing chemicals located in the north, west, east and southeast regions with three primary locations for minor services in the north, west and southeast regions. Generally trucks traveling to and from their assigned zones will do so with their plows up and spreaders off. It is critical to service their assigned zones for the success of the operation as a whole. Servicing all traveled roads between assigned zones would significantly reduce their effectiveness in their assigned zones by increasing travel times, reducing the materials available to properly service their assigned zone and unnecessarily increase the wear and tear on the equipment.

12) Why do I see trucks backing up hills?

In icy or slick conditions, trucks may back up hills applying materials from the rear spreader as they move up the hill. This allows both the drive and steer wheels to be on treated areas to improve traction and control of the equipment compared to traveling forward down the hill when the wheels would be on untreated areas.

13) Why do trucks plow snow onto my clean drive apron?

There is no malicious intention to plow snow into the drive aprons, however it is necessary to clear the street curb to curb (or edge of pavement to edge of pavement) to allow proper drainage to get the snow melt to the inlets. If the streets are not cleared curb to curb, the snow melt will puddle and pond in the roadway and re-freeze into a sheet of clear ice. The operators do try to avoid plowing snow into the drive aprons as much as possible, but their ability to do so is reduced with the greater amounts of snowfall during each event and the accumulation of snowfall from previous events.

If you have any questions or to report a problem, please call the 3-1-1 Call Center by dialing 3-1-1 on your landline phone inside the city limits or by calling 330-375-2311 from your cell phone.